

Remarks

The Office Action dated of April 13, 2004 has been received and duly noted.

Claim 1 has been amended to include the limitation previously set forth in Claim 3, although the recitation to the substantially unrestricted flow passage previously added to Claim 1 has been deleted and is now set forth as newly added Claim 40. In view of the prior Office Action which indicated that original Claim 1 would be allowable if amended to include the subject matter of Claim 3, Applicant submits that amended Claim 1 as well as the claims dependent thereon are in condition for allowance.

Claims 22-33 and 36-39 have been allowed.

Newly added Claim 41 is directed to the embodiment of Figure 4, and is considered distinguishable from the references cited by the Examiner. More particularly, Claim 41 recites that the first one-way flow valve comprises an elastomeric seal carried internally of the collar for moving radially inward to admit fluid into the collar through the flow passage when the pressure of fluid external to the collar is greater than the fluid pressure internal to the collar. Claim 41 further recites that the elastomeric seal moves radially outward to seal the entry flow passage to prevent exit flow from the collar through the entry passage when the pressure of fluid internal to the collar is greater than the pressure of fluid external to the collar. Claim 41 thus defines a seal which moves radially inward and radially outward to block flow or permit flow through the flow passage, which is unlike the arrangement of Pitts, U.S. Patent 3,559,734, in which the valve element 3 is moved axially upward in response to fluid pressure to open the port in the tube. The valve element 3 thus does not move radially inward or radially

outward to open or close flow through the port. Moreover, the structure of the cementing collar according to the present invention preferably provides that a float valve is the second one-way flow valve, and a float valve as shown in Figures 4 and 5 of Pitts substantially restricts flow through the tubular body in the area of the flow passages, which is unlike the preferred embodiment of this invention. Even if the combination suggested by the Examiner is made, however, the cited references fails to teach the combination set forth in Claim 41, wherein the first one-way valve comprises an elastomeric seal which moves radially inward and radially outward to control the flow of fluid through the entry flow passage.

In view of the above, early allowance of the application is requested.

Respectfully submitted,

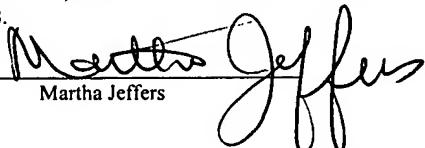


Loren G. Helmreich
Reg. No. 29,389

Date: April 26, 2004
BROWNING BUSHMAN, P.C.
5718 Westheimer, Suite 1800
Houston, Texas 77057
Tel.: (713) 266-5593
Fax: (713) 266-5169

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By: 
Martha Jeffers